

**NANC change orders 399 and 400 are  
consistent with FCC NP policies**

August 4, 2005

## Summary - FCC should withdraw its abeyance directive regarding NANC change orders 399 and 400



- The two change orders are independent and were reviewed separately by the Future of Numbering WG (FoN).
- NANC 399, conclusion of the FoN - “The FoN determined that Change Order 399 did not have any policy, regulatory or consumer impacts and should proceed per the recommendation from the NANC LNPA Working Group. On behalf of the NANC, I , therefore, recommend that the FCC should advise the NAPM LLC that Change Order 399 should no longer be held in abeyance.”
- NANC 400, conclusion of the FoN - “The FoN was unable to reach consensus as to any conclusions or recommendations for the treatment of Change Order 400.”
  - The FoN was unable to reach consensus as to there being any policy, regulatory, or consumer issues associated with NANC 400.
  - NANC 400 is consistent with FCC NP policies.
- The FCC should withdraw its abeyance directive and allow NANC 399 and 400 to proceed per the NANC LNPA change management process.

## **NANC 399 and 400 are within the regulatory scope of the NPAC and are consistent with existing data fields**



- These fields are directly analogous to existing service routing fields in the NPAC such as CNAM and voice mail.
- There are no changes to any NPAC portability processes, i.e., these are new fields added to existing records.
- These fields do not require companies that are not currently users of the NPAC to become users.
- No new capability is created by adding these fields, i.e., NPAC still supports service provider portability and number pooling.

- Currently in the NPAC:
  - Wireline and wireless service is designated at the service provider level not at the TN level
  - There is no ability to designate alternate service provider arrangements such as reseller and Mobile Virtual Network Operator (MVNO)
- NANC 399 adds two data fields to each ported & pooled TN record:
  - A Service Type
    - Can be wireline, wireless, VoWiFi, or VoIP
  - An Alternate SPID, for example:
    - Can indicate the reseller serving the TN
    - Can indicate the MVNO serving the TN
    - Can indicate the serving VoIP provider which uses a facilities-based carrier to receive its PSTN-routed traffic
- NANC 399 does not change any portability processes.

- LNPA WG recommendation:  
There is consensus by the LNPA WG that NANC 399 should be included in the next NPAC release.
- FoN recommendation:  
“The FoN determined that Change Order 399 did not have any policy, regulatory or consumer impacts and should proceed per the recommendation from the NANC LNPA Working Group.”
- Robert Atkinson, NANC Chair, recommendation:  
“On behalf of the NANC, I, therefore, recommend that the FCC should advise the NAPM LLC that Change Order 399 should no longer be held in abeyance.”
- The FCC should withdraw its abeyance directive and allow NANC 399 to proceed per the NANC LNPA change management process.

- NANC 400 adds four new fields to each ported & pooled TN record
  - Analogous to existing service routing fields in NPAC
- Does not change any porting processes
  - New routing fields would be broadcasted alongside existing fields
  - No behavior, process, or timer changes
- New fields are required by the deployment of new services and supporting network infrastructure and are subject to existing ported/pooled mandates
  - The fields are not a result of any change in NPAC role or FCC/NANC policies
- The proposed new fields are Universal Resource Identifiers (URIs). The services they support are:
  - Multimedia message service (MMS)
  - Push-to-talk over cellular (POC) - two URIs; PoC and presence
  - VoIP gateway discovery

# NANC 400 is consistent with the FCC's definition of service provider portability



- The 1996 Act and the FCC's First NP Order defines service provider portability as:
  - "... the ability of users of telecommunications services to retain, at the same locations, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another."<sup>1</sup>
- The services associated with NANC 400 are intended for "users of telecommunications services".
- NANC 400 enables the porting of telephone numbers from "one telecommunications carrier to another" without impairing "quality reliability or convenience" of the services used by the customers.
- Service providers and their subscribers have come to rely on MMS and Push-to-talk as part of their wireless telephone service.

<sup>1</sup> 47 U.S.C. § 153(30); *In the Matter of Telephone Number Portability*, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 95-116, FCC 96-286, ¶7 (1996) ("First NP Order").

# FCC NP performance criteria ensure improvement and evolution of NP over time



- The FCC chose to adopt a list of performance criteria rather than choose a specific solution and architecture for the implementation of NP.
  - The FCC selected this approach because:
    - It would provide “the ability of carriers to improve on those methods ....”<sup>2</sup>
    - It would maintain “flexibility to accommodate innovation and improvement.”<sup>3</sup>
- By selecting the performance criteria approach the FCC ensured that NP would have the flexibility necessary to improve and evolve as new services and features associated with telephone numbers were introduced.
- MMS, Push-to-talk, and VoIP are new services that rely on telephone numbers and therefore are consistent with the FCC’s performance criteria.

<sup>2</sup> *First NP Order* at ¶46.

<sup>3</sup> *Id.* at ¶47.



# FCC NP performance criteria ensure against loss of services and loss of quality of service



- The first performance criteria states that existing network services, features, and capabilities such as CLASS and caller ID must be supported:
  - “...customers are not likely to switch carriers and retain their telephone numbers if they are required to forego services and features to which they have become accustomed.”<sup>4</sup>
- The fifth performance criteria states that portability must not result in “unreasonable degradation to the...quality of existing services.”<sup>5</sup>
- In discussing the sixth performance criteria, the FCC states:
  - “We interpret this [statutory] mandate to mean, at a minimum, that when a customer switches carriers, that customer must not experience ... loss of services (such as CLASS Features) due to number portability compared to when the customer was with the original carrier.”<sup>6</sup>

<sup>4</sup> *Id.* at ¶49, fn 146 (stating that including certain national calling features in the NPAC are in the public interest because of additional consumer choice and efficiency gains).

<sup>5</sup> *Id.* at ¶55.

<sup>6</sup> *Id.* at ¶56.

- Number portability affects the services addressed by NANC 400 and can result in degradation to quality of service or loss of service.
- Service providers and their subscribers have come to rely on MMS and Push-to-talk as part of their wireless telephone service.
- Because two of the three services are widespread in the wireless industry, the absence of this change order has a greater impact on the wireless industry.

# The NANC should decide what services should be supported by the NPAC

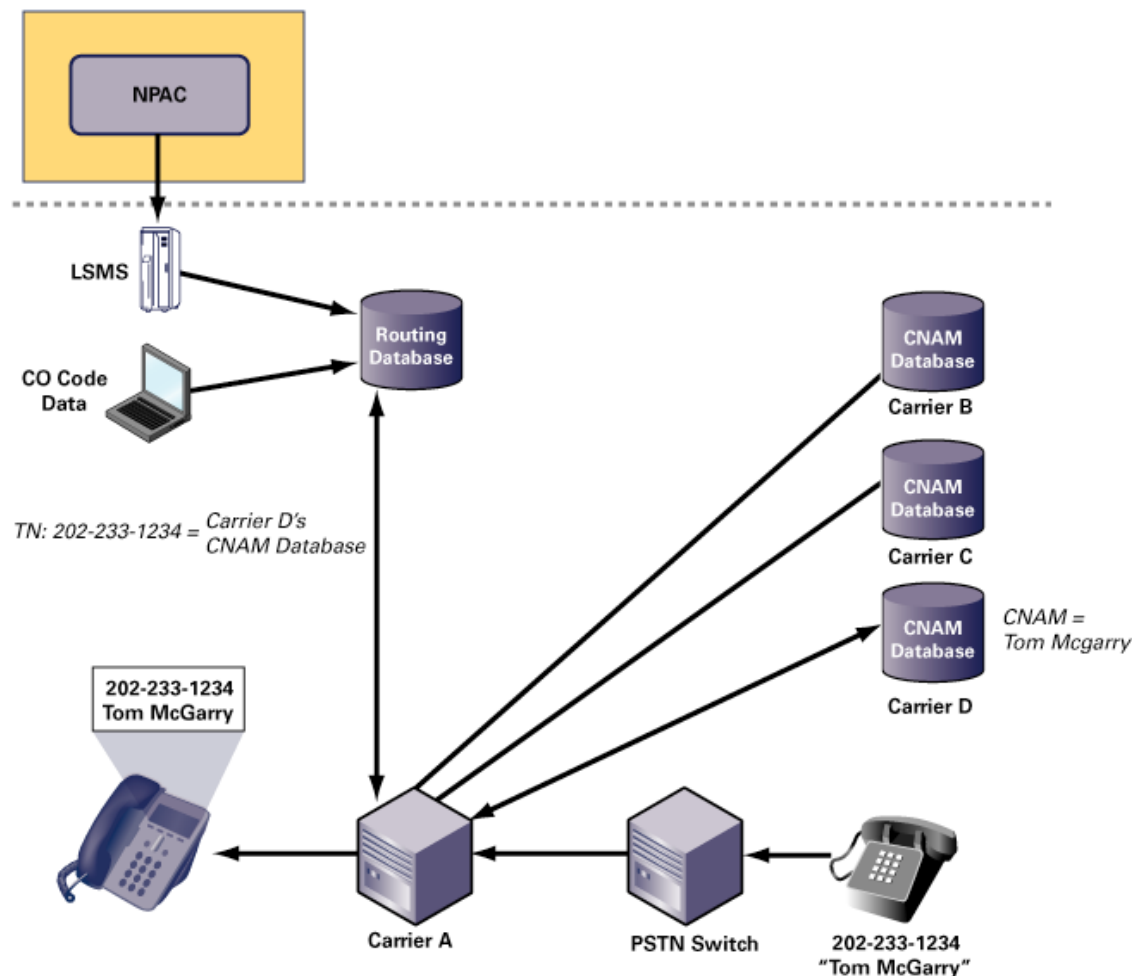


- In the Second NP Order, the FCC noted that “future modifications” to the “architectural, technical and operational standards” would be necessitated by “changing technological and market conditions, as well as unforeseen circumstances.” Such NPAC changes, via the “change management process” would be approved or disapproved by the NANC.<sup>7</sup>
- The services that the number portability criteria supports are not limited to those services defined as “telecommunications services” by the FCC.
  - Inter-switch Voice Messaging (ISVM) - At the inception of the NPAC, the NANC approved a field to support voice messaging. Voice messaging is defined as an “information service” by the FCC.
  - Wireless Short Message Service (SMS) - As WNP was implemented, the NANC (LNPA WG) approved the addition of a field to support SMS. SMS is analogous to services designated by the FCC as information services.

<sup>7</sup> *Telephone Number Portability*, Second Report and Order, CC Docket No. 95-116, FCC 97-289, ¶¶68-69 (1996) .

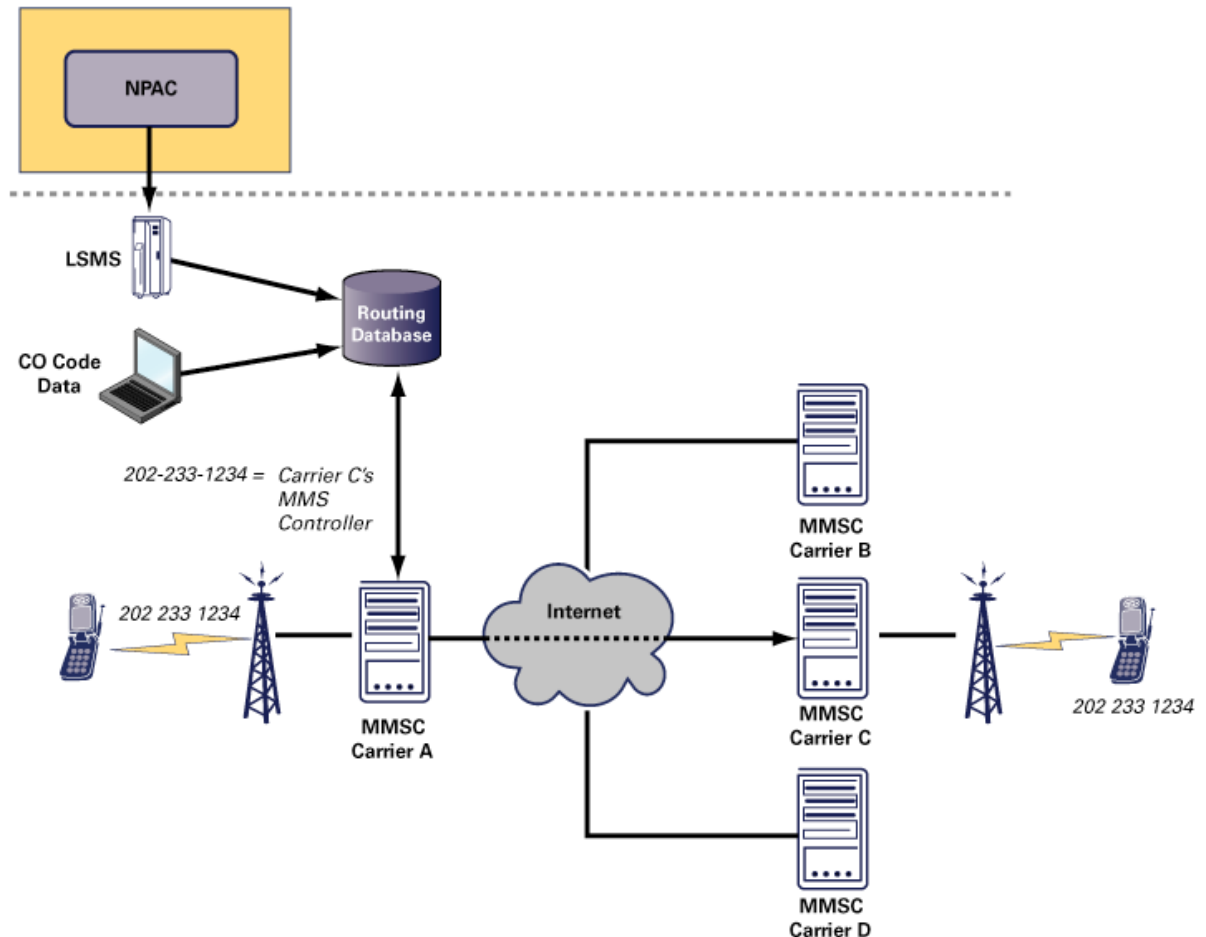
# The NPAC distributes service routing information to maintain service integrity and quality

- Example of how routing information provided by the NPAC is used to support number portability for the calling name service (CNAM)
- Other services supported through the NPAC are; CLASS, LIDB, voice messaging, wireless short message service



# NANC 400 includes service routing information to maintain service integrity and quality

- Example of how routing information provided by the NPAC would be used to support number portability for the multimedia message service.
- Other services supported in NANC 400 are; Push-to-talk (two URIs, push-to-talk over cellular and presence) and VoIP,



- The FCC NP performance criteria were intended to provide flexibility to include future services like those included in NANC 400
- The FCC performance criteria provides safeguards against the loss of services or service quality as consumers switch from one service provider to another.
- The FCC designated the NANC (LNPA WG) as the entity that should decide the information necessary to meet the performance criteria and therefore support number portability.
  - The NANC (LNPA WG) has recommended that NANC 400 be included in NPAC Release 3.3 in a turned off state.
- The FoN was unable to reach consensus on the existence of any policy, regulatory or consumer issues associated with NANC 400.

## Conclusion - FCC should withdraw its abeyance directive regarding NANC change orders 399 and 400



- The FCC should withdraw its abeyance directive and allow NANC 399 to proceed per the NANC LNPA change management process.
  - FoN has reached consensus that NANC 399 should proceed per the recommendation from the NANC LNPA Working Group.
  - The NANC recommends that Change Order 399 should no longer be held in abeyance.
- The FCC should withdraw its abeyance directive and allow NANC 400 to proceed per the NANC LNPA change management process.
  - NANC 400 is consistent with FCC NP policies
  - The FoN was unable to reach consensus on there being any policy, regulatory or consumer issues associated with NANC 400.